

Title (en)
A METHOD AND APPARATUS FOR CONTROLLING A LOAD

Title (de)
VERFAHREN UND VORRICHTUNG ZUR STEUERUNG EINER LAST

Title (fr)
PROCÉDÉ ET APPAREIL DE COMMANDE D'UNE CHARGE

Publication
EP 3198999 A2 20170802 (EN)

Application
EP 15843420 A 20150920

Priority
• US 201462054019 P 20140923
• IL 2015050946 W 20150920

Abstract (en)
[origin: WO2016046814A2] A method and apparatus for switching AC power to a lamp (or other load) via a two terminal switch device. The switch device comprises a first electrically controlled switch, such as a triac or relay, and a second electrically controlled resistance or switch connected in series to the first switch. A diode is connected in parallel to the second switch. When the first switch is open, only a leakage current is flowing through the switch device, supplied to an AC/DC converter for producing a low DC voltage to the switch device logic and other low-voltage circuits and for charging a capacitor. When the first switch is closed, the second switch is controlled to be conductive for allowing powering the lamp from the AC power. During part of a positive half-cycle of the AC voltage, a closed loop regulates a DC voltage over the second switch terminals for providing a low DC voltage for charging a capacitor. At least during a negative half-cycle of the AC voltage, the low DC voltage is provided from the capacitor.

IPC 8 full level
H05B 39/02 (2006.01); **H05B 39/04** (2006.01)

CPC (source: EP US)
H02J 3/00 (2013.01 - US); **H02J 7/0068** (2013.01 - US); **H02J 7/02** (2013.01 - US); **H05B 39/041** (2013.01 - EP US); **H05B 47/115** (2020.01 - EP US); **H05B 47/175** (2020.01 - EP US); **H05B 47/19** (2020.01 - EP US); **H02J 7/345** (2013.01 - US); **H02M 1/0006** (2021.05 - EP US); **H04W 4/80** (2018.02 - EP US); **H04W 84/12** (2013.01 - US); **H05B 47/125** (2020.01 - EP US); **H05B 47/13** (2020.01 - EP US); **H05B 47/195** (2020.01 - EP US); **Y02B 20/00** (2013.01 - EP); **Y02B 20/40** (2013.01 - EP)

Cited by
RU2747531C1; WO2021084154A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
WO 2016046814 A2 20160331; **WO 2016046814 A3 20160512**; AU 2015323349 A1 20170406; AU 2015323349 B2 20190919; CA 2961450 A1 20160331; CA 2961450 C 20230905; EP 3198999 A2 20170802; EP 3198999 A4 20180801; EP 3198999 B1 20200624; ES 2820802 T3 20210422; IL 251180 A0 20170529; IL 251180 A 20171231; SG 11201702267W A 20170427; US 2017271904 A1 20170921; US 2018233938 A1 20180816; US 9966779 B2 20180508; ZA 201702742 B 20180530

DOCDB simple family (application)
IL 2015050946 W 20150920; AU 2015323349 A 20150920; CA 2961450 A 20150920; EP 15843420 A 20150920; ES 15843420 T 20150920; IL 25118017 A 20170315; SG 11201702267W A 20150920; US 201515511315 A 20150920; US 201815955789 A 20180418; ZA 201702742 A 20170418